

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virginia 22313-1450 www.wepto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/593,415  | 07/17/2007  | Adolfo Cartaxo       | 2004P20726WOUS      | 1262             |
| 8713 750 10/02/2009<br>Dickinson Wight, PLLC<br>1875 Eye Street, NW<br>Suite 1200<br>Washington, DC 20006 |             |                      | EXAMINER            |                  |
|   |             |                      | PHAN, HANH          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2613                |                  |
|   |             |                      |                     |                  |
|   |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|   |             |                      | 10/02/2009          | EL ECTRONIC      |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kspivak@dickinsonwright.com awilson@dickinsonwright.com cvphillips@dickinsonwright.com

# Application No. Applicant(s) 10/593 415 CARTAXO ET AL. Office Action Summary Examiner Art Unit Hanh Phan 2613 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 17 July 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 17-32 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) 17 and 21-32 is/are allowed. 6) Claim(s) 18-20 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date \_

Notice of Draftsperson's Patent Drawing Review (PTO-948)
Notice of Draftsperson's Patent Drawing Review (PTO-948)
Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Art Unit: 2613

#### DETAILED ACTION

#### Priority

 Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Drawings

2. Figures 1A, 1B, 2A, 2B, 3, 4A, 4B, and 4C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Application/Control Number: 10/593,415

Art Unit: 2613

4. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the electrical analog processor" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the electrical analog processor" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the electrical analog processor" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

# Allowable Subject Matter

- 5. Claims 17 and 21-32 are allowed.
  - Claims 18-20 are allowed (if overcome the 112 rejection above).
- 6. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 17 and 28, the prior art of record fails to teach an apparatus for generating a single sideband signal from an input optical signal, comprising: an optical phase modulator that optically phase modulates the input optical signal in accordance with a control signal to produce the single sideband signal; a converter that converts a portion of the input optical signal into a corresponding electrical signal; and a control signal generator that generates the control signal in

Art Unit: 2613

response to an optical signal pulse shape of the input optical signal represented in the portion of the input optical signal converted into the electrical signal.

#### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Way et al (US Patent No. 6,525,857) discloses an apparatus for interleaved optical single sideband modulation.

Olshansky (US Patent No. 5,301,058) discloses single sideband optical modulator for lightwave sysyems.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

/Hanh Phan/

Primary Examiner, Art Unit 2613